What Price SDI?

The debate over President Reagan's Strategic Defense Initiative (SDI), which since last month's Reykjavik meeting has assumed major political overtones, has focused on technical or negotiating issues that cannot be resolved on the basis of information now available. Many assertions pro and con are pure conjecture. A more useful perspective may be gained by placing what actually is observable with respect to the SDI controversy in the context of the types of behavior that often have characterized attempts to enter into difficult agreements. From this vantage point, it would appear that the costs of abandoning SDI could be far greater than the price of going ahead with the program.

The dramatic meeting between President Reagan and Chairman Gorbachev at Reykjavik, Iceland, founded on the President's refusal to yield any ground on the development of technology for the Strategic Defense Initiative (SDI). Since then, the President's stance has generated heated political debate both here and abroad about the desirability of the so-called Star Wars project. Given the perceived stakes of the outcome, SDI probably will continue to dominate the arms control debate for some time.

However, there appears to be considerable perplexity — in scientific circles as well as in the public media — as to the technical capabilities of the proposed defense system. Many, including some scientists, say it won't work. Likewise, there is disagreement about SDI's possible usefulness both in arms control negotiations and on the nuclear battlefield. (Some say it is a bargaining chip, others say it is an obstacle to negotiations. Some say that it is purely defensive; others say that, because it could destroy incoming Soviet retaliatory missiles, SDI in effect would give the United States a first-strike capability.)

The current confusion is hardly surprising, since most of the arguments offered pro and con rely for support on pure conjecture. It is far beyond the scope of this brief discussion to consider the merits even of the simplistic technical assertions made about SDI. Even so, it should be plainly apparent, given that the system has not been developed, that no one can "know" precisely what capabilities SDI might eventually possess or what strategic considerations may affect future U.S.-Soviet arms negotiations. The matter of predicting human behavior in international negotiations is even more problematic, especially when there are so many uncertainties with respect to the tangibles being negotiated. A more useful perspective to the SDI debate may be gained by placing what has been and is observable and pertinent to the SDI controversy in a behavioral context.

A number of myths surround the arms controversy. Perhaps most entrenched, in the words of former British minister of state Lord Chalfont, is "the widely held belief that large military establishments and stockpiles of weapons are a prime cause of tension and that if they were reduced or abolished, universal harmony would prevail." As he observes, however, "The somber truth is that the political systems of the Soviet Union and the West are irreconcilable." Even if all nuclear weapons were abolished, international tensions would persist and wars, possibly that would bring an end to human civilization, could and probably would occur. It seems almost too obvious to mention that countless other "all out" conflicts (including two world wars) were started before nuclear weapons existed. Moreover, the technology for other "doomsday" weapons — e.g., chemical and biological agents — already exists and is perhaps more difficult to monitor than nuclear arms. "Ending the nuclear arms race" would not produce a peaceful utopia.

The unhappy fact is that throughout human history, technologies that can be applied to military uses have never been "de-invented." Rather, those powers that lacked the latest in military technology assiduously tried to acquire it — as is happening throughout the world today. The notion that the superpowers, let alone the nuclear-armed lesser nations, will voluntarily agree to give all of them up seems sheer fantasy. (This does not rule out the possibility that some reduction in arms may be achieved.)

The idea that nuclear weapons must be abolished or we will all die thus would seem to hold out little hope if the foregoing analysis is sound. However, in view of actual experience since nuclear weaponry has been developed, this notion also seems mistaken. For the presence of nuclear arms appears to have had an effect opposite to that supposed by many critics of the defense establishment.

"Balance of Terror" or "Nuclear Umbrella"?

In fact, few professional peace advocates have been willing to assess dispassionately either the consequences so far of maintaining the so-called balance of nuclear terror or the probable effects that the development of SDI will have on that balance. With respect to the first, no one would dispute that an entire generation of humans now has lived with the possibility that a nuclear conflagration could take place — and at several junctures (notably the 1962 Cuban missile crisis) that possibility seemed far from remote. But such confrontations did not result in nuclear war — or, in war of any kind, which probably would have occurred without the threat of nuclear destruction. As emotionally painful as it undoubtedly is for many people to accept, we live in an age — as all previous generations have — in which humans have the capacity to destroy themselves by one means or another. That today's means of doing so are relatively new does not alter the fact that people have been killing each other in wars since the dawn of time.

By that bloody account, the nuclear age — in terms of the number of lives lost in wars — has been one of relative peacefulness. Nuclear arms evidently have functioned as a deterrent to the type of all-out aggression that character-
ized conventional military exploits throughout history. Thus, what peace activists name the "balance of terror" could just as well be named the "nuclear umbrella" — as suggested by the response of America's Western European allies to President Reagan's offer at Reykjavik to withdraw all Pershing and cruise missiles from Western Europe in return for a pull-out of all Soviet SS-20 missiles on the eastern border (the so-called zero-zero option). Although some of our allies have previously been highly vocal in their opposition to the placement of American missiles on European soil, when confronted with the possibility that they might be removed, the leaders quickly changed their tune. Now they say that removal of the missiles would leave them vulnerable to a conventional Soviet attack. In short, they appear to have come to realize the immediate protection offered by the "nuclear umbrella."

SDI Still Matters

The foregoing discussion might imply that, given the admittedly perverse "benefits" of nuclear weaponry, the SDI controversy is largely incidental. It is not. Since its inception in 1983, SDI has been taken very seriously by the Soviets, and their position has been consistent and stodgy. Although the Soviet Union has long been working on weapons that include directed energy, particle beams, and lasers based on earth and in space, the U.S.S.R. has adamantly insisted that the United States abandon the SDI research program as a precondition for agreement in all other areas of the arms controversy. Every propaganda move that Chairman Gorbachev and company recently have made seems to have been designed to scuttle the SDI. Whether or not SDI will work, the Soviets would seem to appear to believe that it will, and that we can make it work better than they can. Beyond the question of its actual workability, this apparent perception is of the utmost consequence.

If there is any lesson to be learned from past human attempts to enter into agreements that involve sacrifice of some individual interest (presumably, for the sake of some larger benefit), it is that those which rely primarily on voluntary commitments that involve few penalties have the least chance of being made and honored. Those that involve the greatest penalties (actual or perceived) seem to have had far greater chance of success. This appears to have been so for a wide range of human associations — from marriage arrangements (where casual relationships between men and women are tolerated, marriage rates fall, and where divorce laws are liberalized, divorce rates shoot up) to economic agreements (voluntary economic agreements, such as those recently attempted by OPEC with respect to oil prices or the Group of Five nations with respect to currency and interest-rate stability, have had a notoriously small chance of succeeding).

Treaties among nations, which involve not individuals but powerful groups of competing interests — between and within nations — have been among the most fragile of human agreements. Those that have relied primarily on voluntary commitments have usually been quickly abandoned when the stakes have changed. Of course, no one can possibly take into account all the factors involved and no one can predict with certainty Soviet behavior in any given situation. Be that as it may, in view of the evident importance the Soviets place on SDI — and quite apart from its actual feasibility — any action that would reduce the stakes in arms control negotiations and thereby create an environment for more voluntary and therefore less-enduring types of commitments on the part of the Soviets would be folly. Without question the SDI program is costly. But the price of abandoning it at this juncture could be far greater.

ANOTHER LOOK AT INTERNATIONAL PAYMENTS AND THE DOLLAR

That the dollar strengthened markedly against other currencies between 1980 and 1985 has been widely attributed to an influx of foreign capital that financed our deficits. However, classifying international payments according to who made them reveals that is was, in fact, a collapse of U.S. investment flows to other countries that financed our widening trade deficit then. There was no marked increase in the amount of foreign investment in the United States until after the dollar had peaked, and much of that apparently reflects attempts by foreign officials to retard the appreciation of their currencies against the dollar, i.e., to work against the trend fostered by the fundamentals of our unsustainable trade deficits. Expansion of our exports in response to sound economic growth abroad would provide the most favorable resolution of the situation. But, even if it occurs, it will take some time. Meanwhile, the dollar could come under considerable pressure in the foreign-exchange markets.

The Federal Reserve Board recently released its annual revisions to the flow of funds accounts, incorporating the latest historical revisions to the U.S. balance of payments accounts and to the national income and product accounts for the years 1983-85. In the accompanying table, we have summarized the statistics as they relate to the international transactions of the United States for the years 1976-85. The table also shows the estimates (based on preliminary and incomplete data) for the first two quarters of 1986, at seasonally adjusted annual rates and the annual percent change in the ratio of "Special Drawing Rights" (SDRs), which are defined by the International Monetary Fund as a "basket" of important world currencies, to dollars. This series provides an indicator of the strength or weakness of the dollar in relation to other currencies.

Our focus is on the transactions that affect the foreign-exchange value of the dollar. Accordingly, we have re-categorized some flows from their usual presentation. We have excluded the retained earnings of U.S. subsidiaries abroad and of the subsidiaries of foreign companies operating in the United States. Such retained earnings are usually reported as both current account transactions and as offsetting capital account transactions. For example, the retained earnings of foreign companies operating in the United States now reported as an import of the services (the service being the use of another country's capital) and as an inflow of capital from abroad, but nothing is actually remitted to or from the United States.

Similarly, the international payments of the U.S. Government are presumably little influenced by the foreign-exchange value of the dollar, and we have grouped all such transactions into a single category. We have also broken down "international claims" into claims of foreign banks on their U.S. offices (included in "foreign fixed dollar claims" in the table) and claims of U.S. banks on their foreign offices (included in "lending by U.S. banks"). We believe this breakdown better reflects the nature of such flows.

Finally, we have grouped all flows not specifically identified by type (including "statistical discrepancies" arising from the compilation of the data from a wide variety of sources that are subject to errors of reporting) into a single category, "unallocated flows," and included it as a capital inflow. Overlooked items, in general, are far more likely to be capital transactions rather than unreported imports, exports, or government payments. In particular, the data do not include any purchases of real estate by foreigners. Because the total of "unallocated flows" was positive in all
INTERNATIONAL RECEIPTS (+) AND PAYMENTS (-) OF THE UNITED STATES
(As a Percent of Gross National Product)

Analysis of our international payments by type reveals that there was no “surge” of foreign capital into the United States until after the foreign-exchange value of the dollar had increased markedly above its 1980 lows. Our current account deficit was “financed” mainly by a collapse of U.S. investment abroad. Moreover, our widening trade deficit reflected a diminishing importance of exports in our economy far more than a “deluge” of imports.

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<td>+0.6</td>
<td>+0.5</td>
<td>+0.5</td>
<td>+0.3</td>
<td>+0.3</td>
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<td>+0.3</td>
<td>+0.8</td>
<td>+0.3</td>
<td>+0.7</td>
<td>+0.9</td>
<td>-0.2</td>
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<td>+2.1</td>
<td>+1.3</td>
<td>+2.6</td>
<td>+1.9</td>
<td>+1.9</td>
<td>+1.9</td>
<td>+3.0</td>
<td>+3.1</td>
<td>+0.4</td>
<td>+4.6</td>
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<td>-0.3</td>
<td>-0.5</td>
<td>+0.3</td>
<td>-1.5</td>
<td>-1.0</td>
<td>-0.8</td>
<td>+0.0</td>
<td>+0.0</td>
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<td>-0.6</td>
<td>-0.5</td>
<td>-0.3</td>
<td>+0.0</td>
<td>-0.1</td>
<td>+0.5</td>
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<td>-1.0</td>
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<tr>
<td>Capital Inflows (above)</td>
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<td>+2.1</td>
<td>+1.3</td>
<td>+2.6</td>
<td>+1.9</td>
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<td>+3.0</td>
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<td>U.S. Gov't. Transactions</td>
<td>-0.9</td>
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<td>-1.1</td>
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<td>-1.1</td>
<td>-1.1</td>
<td>+0.1</td>
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<tr>
<td>Capital Outflows (above)</td>
<td>-1.8</td>
<td>-1.0</td>
<td>-1.0</td>
<td>-0.7</td>
<td>-2.1</td>
<td>-1.7</td>
<td>-1.3</td>
<td>-0.3</td>
<td>+0.1</td>
<td>+0.3</td>
<td>+2.5</td>
<td>-0.9</td>
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**Memo:**

Percent change in SDRs per dollar

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<tr>
<td></td>
<td>+5.2</td>
<td>-1.1</td>
<td>-6.7</td>
<td>-3.1</td>
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<td>+10.4</td>
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<td>+3.3</td>
<td>+4.3</td>
<td>+1.0</td>
<td>+28.2</td>
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</tbody>
</table>

Note: Totals may not add due to rounding.

1. Preliminary data for the first 6 months only, at annualized rates.
2. Excluding retained earnings of foreign companies operating in the United States.
3. This is the residual of all identified flows and is included here because it is usually a positive amount.
4. Excluding foreign retained earnings of U.S. companies operating abroad.
5. Includes U.S. Government interest paid to foreigners and transfers (foreign aid), which are included in the U.S. current account balance, and all foreign loans and other official capital account transactions.
6. Calculated from annual averages of SDR/dollar rate.


but one of the past 10 years, we have shown it as a part of the capital inflow into the United States. All of the flows in the table are expressed as a percentage of current-dollar U.S. Gross National Product (GNP). This provides a simple means of obtaining a common denominator among flows and among years. Because of rapid price inflation and overall expansion of the U.S. economy, comparisons of dollar flows may be misleading. For example, in 1985, the identified increase in foreign holdings of fixed-dollar claims, including $67.2 billion or about 225 percent more than the corresponding amount ($20.7 billion) during 1976. However, because U.S. GNP increased from $1,782 billion in 1976 to $3,998 in 1985, such purchases then were up only about 45 percent in terms of their significance to the U.S. economy.

In short, the table combines a wide variety of transactions into four types: the balance of payments for goods and services, capital inflows, U.S. Government payments, and capital outflows. We have attempted to divide international payments according to who made them, whether foreign or domestic producers and consumers, foreign or domestic investors, or the U.S. Government.† Positive flows presumably lead to the sales of foreign currencies for dollars, while negative flows presumably lead to sales of dollars for other currencies. It may be noted that (except for possible rounding errors) the total of these four components is always zero. This simply reflects the fact that, with irredeemable currencies, there must be a buyer for every seller of one currency for another.

For most of the postwar period, surpluses in our balance of current payments for goods and services enabled us to make transfers to foreigners and to be net investors abroad (prior to 1971, we also financed such payments by reducing our official gold holdings). With the onset of floating exchange rates, and especially after the surge in oil prices in 1973, we no longer enjoyed consistent surpluses in our balance of payments for goods and services.

Under floating exchange rates, it was widely presumed that fluctuations in the foreign-exchange value of the dollar would serve to restrain fluctuations in our trade balance. A deficit, for example, would leave foreigners with excess dollars, while negative flows presumably lead to the sales of foreign currencies for dollars. Indeed this seemed to be the way it worked for a time.

The foreign-exchange value of the dollar decreased from 1976 to 1980, and balance of payments for goods and services improved from deficit to surplus. After 1980, the foreign-exchange value of the dollar began to increase. But...
the dollar continued to increase even as the trade balance deteriorated markedly in 1983 and 1984. The trade balance widened even further in 1985 and the first half of 1986, after the dollar peaked and began to decrease.

The next to last column of the table shows the change in the annual flows, as percentages of GNP, between 1980, when the dollar reached its lows in the foreign-exchange markets, and 1985, when it peaked. Over these 5 years the dollar appreciated 28.2 percent against SDRs, and the balance of payments for goods and services deteriorated, as a proportion of GNP, by 3.0 percentage points.

The conventional explanation for this marked divergence from the expected changes is that a surge of foreign funds into the United States (alleged to be attracted here by high interest rates, in turn alleged to be a result of large Government budget deficits) boosted the foreign-exchange value of the dollar and financed our deficits. This explanation is not the entire story, or even a useful simplification of it.

As it happened, there was no substantial increase in the flow of foreign capital into the United States as the dollar strengthened in 1981, 1982, and 1983. Capital inflows did not exceed their 1980 level until 1984, and their 1985 level was only 0.4 percentage point of GNP more than they were in 1980. It was not until interest rates decreased markedly from their 1982 highs that foreign purchases of fixed-dollar claims began to increase markedly. In fact, no real "surge" in foreign purchases of U.S. debt instruments occurred until after the dollar began to weaken in 1985 and 1986, and it mainly reflected large purchases by foreign central banks and treasuries attempting to prevent the rapid appreciation of their own currencies against the dollar, as they had done in 1977 and 1978, when the dollar was also weak.

What really served to finance our worsening trade balance between 1980 and 1985 was a collapse of capital outflows, especially of bank lending to foreigners. Such lending was equal to 1.5 percent of GNP in 1980 and foreigners actually paid back more than they borrowed from U.S. banks in 1985, in an amount equal to 0.5 percent of GNP.

Thus the "swing" in bank lending (from -1.5 percent of GNP in 1980 to +0.5 percent in 1985) was equal to two-thirds of the 3.0 percentage point deterioration of the balance of trade from 1980 to 1985. Lower levels of foreign investment by private U.S. investors (mainly a reversal of the flows of corporate direct investment abroad) "financed" another 0.5 percentage point of the deterioration of the trade balance. This is more than a coincidence. A large portion of U.S. exports in 1980 would not have been made if they had not been financed in the United States. It was the capital outflow that created the trade surplus in 1980. As such financing dried up, exports decreased and the trade deficit widened. In hindsight, it is clear that bank lending to foreigners to purchase U.S. products was a blunder that created problems for themselves and the debtor nations now unable to repay their loans. It also was a disservice to U.S. export industries that relied on such credits to gain sales, only to face a sudden and painful contraction later.

Yet, even this does not explain the strength of the dollar between 1980 and 1985. Many analysts have concluded that foreign-exchange rates are determined by short-term transfers of funds from one country to another for purposes such as speculation that may have little to do with economic fundamentals (such as relative prices). The total volume of foreign-exchange transactions is said to exceed that of payments for trade in goods and services and for long-term investments (such as building a plant in another country) by as much as a factor of 100. With floating exchange rates, short-term currency trading may exacerbate short-term fluctuations. But, by definition, a short-term position is one that will be quickly reversed (on currency trading desks, positions are often reversed in a matter of minutes), and presumably it is only flows of the type shown in the table that affect the fundamentals.

Purchases and sales of foreign exchange for trade in goods and services are never reversed, simply because there is no continuing obligation once the transaction is completed. The same holds for most payments by the U.S. Government (although it may eventually collect on some loans). Capital flows that leave investors with assets that can be subsequently liquidated can be reversed (as recent changes in the amount of funds invested abroad by U.S. investors amply demonstrates).

Outlook

As Herbert Stein has remarked, a trend that is unsustainable will end. In present circumstances, the large deficit in current U.S. international payments for goods and services is clearly unsustainable. The question is how it will be reduced and eventually brought into the surplus that would seem to be required to foster economic development around the world. Lesser developed countries need our goods and our capital to advance, just as we needed foreign capital in the early stages of our own development.

The best solution of the problem would be for our exports to grow more rapidly than our imports. Attempts to curtail our imports are likely to fail to reduce the trade deficit because they would deny foreigners the dollars they need to purchase our goods and result in a downward spiral of contraction of trade that would benefit no one.

But the growth of our exports will be beneficial only if it reflects sound growth abroad. Few, if any, analysts expect, or would recommend, that our exports be boosted by a significant increase in lending to foreign "sovereign risks" (i.e., loans to or guaranteed by socialist and dirigiste governments based on the notion that governments do not default, rather than on the merits of the items to be financed). Such a move would simply lead to a repeat of recent experience.

There are some indications that many foreign governments are becoming less enamored of central planning and controls and have become more willing to rely on market forces. But progress in this regard has been painfully slow, and it will have to be sustained to gain the confidence of local and foreign investors.

Meanwhile we are left with a record trade deficit that will probably continue to push the dollar downward against other currencies. If the preliminary data for 1986 are to be believed, the dollar’s main prop at present is an unprecedented capital inflow from abroad at an annual rate equal to an incredible 4.6 percent of GNP. If, as seems likely, this inflow diminishes, then the dollar could rapidly decrease to levels well below its 1980 lows against other currencies.

### PRICE OF GOLD

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<td></td>
<td>Oct. 31</td>
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<tr>
<td>Final fixing in London</td>
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